REMARKS

The Present Invention and the Pending Claims

Claims 1-16 are pending and are directed to an adhesive composition for application to skin.

Summary of the Office Action

The Office has maintained its rejection of claims 1-16 under 35 U.S.C. § 102(b or e) as allegedly anticipated by, or under 35 U.S.C. § 103(a) as allegedly obvious in view of, Muraoka et al. (U.S. Patent 5,876,745) or Muraoka et al. (U.S. Patent 6,139,867). Reconsideration of these rejections is respectfully requested.

Discussion of the Anticipation Rejection

The Office contends that the Muraoka references (U.S. Patents 5,876,745 and 6,139,867) disclose every element of the pending claims and thereby anticipate the present invention. This rejection is traversed for the following reasons.

The present invention pertains to an adhesive composition for application to skin. The adhesive composition of the invention comprises (1) an acrylic copolymer and (2) a carboxylic acid ester (20-120 parts by weight), which is liquid or paste at room temperature. The acrylic copolymer (100 parts by weight) is obtained from a monomer mixture containing (A) a (meth)acrylic acid alkyl ester monomer (40-80 wt.%), (B) an alkoxy group-containing ethylenically unsaturated monomer (10-60 wt.%), and (C) a carboxy group-containing ethylenically unsaturated monomer (1-10 wt.%).

As previously discussed by applicants, the Muraoka references disclose, among many other possibilities, (A) methacrylic acid alkyl ester, (B) alkoxy group-containing ethylenically unsaturated monomer, and (C) carboxy group-containing ethylenically unsaturated mononer as examples of monomers that can be used in combination for the production of an acrylic copolymer. However, neither Muraoka reference specifically teaches an acrylic copolymer obtained from (A), (B), *and* (C), as recited in the pending claims.

While the Examiner points to Run 1 (Example 1) of the Muraoka references in the Office Action, the copolymer obtained by Run 1 is a copolymer of 2-ethylhexyl acrylate, N-vinyl-2-pyrrolidone, and acrylic acid. This copolymer corresponds to the copolymer obtained from components (A) (i.e., 2-ethylhexyl acrylate) and (C) (i.e., acrylic acid) and a monomer

added to compensate for the various properties such as hydrophilicity (i.e., N-vinyl-2-pyrrolidone) (see present specification at page 8, lines 22-27). The copolymer does not comprise component (B). Thus, Run 1 of the Muraoka references does not teach a copolymer obtained from components (A), (B), *and* (C), as recited in the pending claims. Similarly, the copolymer obtained by Run 2 (Example 2) of the Muraoka references is a copolymer of 2-ethylhexyl acrylate and acrylic acid, which is obtained from components (A) and (C), and thus is not an acrylic copolymer obtained from components (A), (B), *and* (C), as recited in the pending claims. The copolymer of Run 1 or 2 is used in the other examples and comparative examples of the Muraoka references.

Accordingly, there is no example of an acrylic copolymer obtained from components (A), (B), *and* (C) in the Muraoka references. All the copolymers taught in the examples and comparative examples of the Muraoka references lack the essential component (B) of the copolymer used in the present invention. Accordingly, an acrylic copolymer such as required by the pending claims is not described at all by the examples and comparative examples of the Muraoka references.

As pointed out in the Office Action, a reference is not limited to its specific examples and preferred embodiments. However, even when considering the entire disclosures of the Muraoka references, the Muraoka references fail to disclose a copolymer obtained from components (A), (B), *and* (C).

Relying on *Ex Parte A* 17 U.S.P.Q.2d 1716 (Bd. Pat. App. & Inter. 1990), the Examiner states that a reference that clearly names a species of a claim anticipates the claim no matter how many other species are additionally named in the reference. In *Ex parte A*, however, the claim in issue recited a species, and the species was named in the cited reference.

Ex parte A did not involve the situation where (a) the claimed species was *not* named in the cited reference and (b) the cited reference only disclosed *components* that could be combined to yield the claimed species. That is the situation here, where no cited reference actually names a copolymer prepared from components (A), (B) *and* (C). Instead, one of ordinary skill in the art would have to select *three* specific *components* from a vast list of suitable monomers in the Muraoka references to obtain the copolymer recited in the pending claims. An analogous situation would be relying on the Periodic Table of Elements to reject

a claim to a new compound because the components (e.g., the individual atoms) are disclosed in the Periodic Table of Elements. No one would argue that such a rejection is improper because it is well-settled that, for a reference to be considered anticipatory of a claim, the subject matter of the claim needs to be identically described in the cited reference.

In that respect, the predecessor court of the U.S. Court of Appeals for the Federal Circuit held some time ago:

> Thus, for the instant rejection under 35 U.S.C. § 102(e) to have been proper, the [cited] reference must clearly and unequivocally disclose the claimed compound or direct those skilled in the art to the compound without *any* need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference.

In re Arkley, 455 F.2d 586, 587-88, 172 U.S.P.Q. 524, 526 (C.C.P.A. 1972) (emphasis in original). See generally *General Battery Corp. v. Gould, Inc.*, 545 F. Supp. 731, 215 U.S.P.Q. 1007 (D. Del. 1982) (the elements of a claimed invention must be found in exactly the same way in a prior art reference for that prior art reference to anticipate the claimed invention), as well as the court decisions cited therein.

The Muraoka references disclose the names of each of components (A), (B), and (C). However, as mentioned above, *a copolymer comprising components (A), (B), and (C)* is not actually disclosed anywhere in the Muraoka references. Accordingly, the Muraoka references do not disclose each and every element of the pending claims, with the result that the anticipation rejection is improper and should be withdrawn.

Discussion of the Obviousness Rejection

According to the Examiner, if the claimed subject matter is not anticipated by the Muraoka references, then the claimed subject matter is obvious in view of their disclosures. This alternative rejection is traversed for the following reasons.

The Muraoka references disclose many possible components for a copolymer with no teaching to select and combine components (A), (B), *and* (C), as opposed to other combinations of components, to form a copolymer. Even considering the more limited

"preferred" monomers disclosed in the Muraoka references (see col. 3, lines 53-62, in the '745 patent, and col. 3, lines 47-56, of the '867 patent), those of ordinary skill in the art would not have been inevitably or necessarily led to provide a copolymer obtained from components (A), (B), *and* (C), without the benefit of hindsight knowledge of the present invention. There simply is no pointer in either reference to dismiss certain disclosed monomers and specifically select components (A), (B), *and* (C) to prepare an acrylic copolymer for use in an adhesive composition. Indeed neither Muraoka reference recognizes any specific benefit to providing such a copolymer.

Instead of citing to anything in any reference to support the notion that one of ordinary skill in the art would know to precisely pick components (A), (B), *and* (C) to arrive at the copolymer of the claimed composition, the Office Action merely states that "[it] would have been readily envisaged" or "obvious to the skilled artisan to extrapolate" (see Office Action, page 4, first and second paragraphs). Something more than such generalized and wholly unsupported assertions are necessary to support a prior art rejection.

In addition, the present invention offers a remarkable effect in that the problems of maceration on the skin surface during adhesion and decrease in adhesive force during perspiration, both of which problems typically exist with adhesive tapes applied to skin, can be better resolved by the use of an acrylic copolymer containing components (A), (B), *and* (C). As is apparent from the information presented in the specification, this effect cannot be obtained by the use of a copolymer which merely contains components (A) and (C), such as the copolymer utilized in the examples of the Muraoka references.

In particular, Table 1 of the present application provides a comparison of the properties of (i) an acrylic copolymer essentially containing components (A), (B), *and* (C) (i.e., the present invention; see Example 1 of the present application) and (ii) an acrylic copolymer containing only components (A) and (C) (Comparative Example 2 of the present application). Comparative Example 2 of the present application uses an acrylic copolymer obtained by copolymerizing 2-ethylhexyl acrylate (component (A)) with acrylic acid (component (C)), which is similar to the acrylic copolymer described in Runs 1 and 2, particularly Run 2, of the Muraoka references. Even though the adhesive sheet of Comparative Example 2 had a gel ratio within the range of 30-80%, the adhesive sheet of Comparative Example 2 exhibited lower adhesion to the skin at a normal state and during perspiration as compared to the adhesive tape of Example 1. The adhesive sheet of

Comparative Example 2 also exhibited a greater difference in the adhesion to skin between a normal state and during perspiration. In addition, the adhesive sheet of Comparative Example 2 exhibited a lower moisture permeation level and a higher degree of skin maceration after peeling off skin as compared to adhesive type of Example 1.

Thus, not only do the Muraoka references fail to reasonably direct one of ordinary skill in the art to the present invention, the present invention exhibits unexpected and beneficial properties.

Under the circumstances, the present invention as defined by the pending claims cannot properly be considered to have been obvious in view of the Muraoka references. The obviousness rejection, therefore, is improper and should be withdrawn.

Conclusion

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

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